Virginia Incidence Surveillance Program

Frequently Asked Questions August 4, 2008

1. How is the HIV epidemic tracked?

 The HIV reporting system tracks many aspects of the epidemic, including HIV and AIDS diagnoses, the number and characteristics of people living with HIV and AIDS (PLWHA), deaths among persons with HIV and AIDS, and the number of new HIV infections. All of these components work together to provide the most complete profile of the epidemic that is possible.

2. What is the HIV reporting system?

 HIV reporting involves the collection of data relating to HIV positive labs tests, physician ordered labs specifically for HIV medical care, and medical conditions that are AIDS related. This data is collected from the time one first tests HIV positive until death. Public health reporting programs receive this information from health care providers who diagnose HIV and AIDS and laboratories that perform HIV-related testing.

3. What is incidence? What is prevalence?

- HIV incidence is the number of new HIV infections in a specific population during a specific time period. (i.e. how many people contract HIV in a given timeframe)
- HIV prevalence is the total number of people living with HIV, including new infections and those who have been positive for years.

4. What do the national and state incidence estimations tell us?

- Nationally an estimated 56,300 people contracted HIV in 2006.
- 1,200 Virginians are estimated to have contracted HIV in 2006.

5. What is the history of the Virginia Incidence Surveillance Program?

- Funded initially in 2002 by the CDC.
- Partnered with DCLS-the state public health lab-- in June 2004 to begin incidence-specific testing for clients tested at 3 piloted public health sites: Arlington, Norfolk, and Richmond.
- Expanded to include all health districts in Virginia by December 31st, 2005.
- Have since "enrolled" other laboratories both in-state and out-of-state that perform HIV confirmatory testing for Virginia patients.



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6. How does the Incidence Surveillance Program work?

- "Participating" labs that perform western blots to confirm HIV positivity for Virginia patients sent leftover blood from that sample to the CDC-incidence testing lab in New York state using numerical codes and labels only (meaning...no names).
- Incidence lab performs the STARHS (defined in question #7) test to determine if that sample is a "recent" or "long-term" infection.
- Those results are sent to Virginia and the CDC and are used for the estimate calculation.
- In VA, health counselors provide counseling and referral services for people newly diagnosed with HIV. Field staff also collect data regarding testing history behaviors from these patients. The data collected is used in conjunction with the incidence test result to perform the estimation calculation.

7. What is STARHS and how does it work?

- Serologic Testing Algorithm for Recent HIV-1 Seroconversion.
- It is the testing method to determine if a blood specimen is a "recent" or "long-term" infection.
- Is based on the typical human antibody response/production timeline after contracting HIV infection.
- "Recent" infection is defined as HIV acquired within the 6 months prior to testing HIV positive for the first time.
- "Long-term" infection is defined as HIV acquired more than 6 months prior to testing HIV positive for the first time.

8. Why is this specific HIV incidence surveillance important?

- To provide data that will accurately characterize current HIV transmission.
- To be able to focus HIV prevention efforts more effectively.
- To more effectively allocate resources towards groups with recent infection rates.
- Provides an opportunity to identify key elements of the HIV epidemic in Virginia and nation-wide.
- The use of local/state information will allow areas to examine which of their specific populations are most impacted by HIV.



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9. How is the incidence estimate different than the number of cases reported?

- This calculation is the estimate of how many people came in contact with and subsequently contracted HIV in a year (2006) (new infections).
- Reported cases are incoming reports from physicians' offices and labs of people testing positive for the first time (*newly diagnosed*).
 - Example: If ten people go to a clinic today and they all test positive for HIV...they would all be part of the *newly diagnosed reported* cases. However, some of those 10 people could have contracted HIV five years ago, some could have contracted it last year, and some could have contracted it three months ago—there is no way to tell exactly how long someone has had HIV. Therefore, they are all newly diagnosed, but not all are newly infected with HIV.

10. Why doesn't this number compare to CDC's previously reported 40,000 new infections/year?

- Old estimate of 40,000 infections per year was calculated using different methodology.
- Differences occur in the calculation method rather than differences in the number of new infections.
- The new estimate relies heavily on the current HIV reporting system which provides the most comprehensive picture of the epidemic.